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OAM Commands-1



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Chapter 1 OAM Commands

1.1 clear oam event

[Function]

Clear OAM event information note.

[Command format]

clear oam event

[Command Modes]

Interface configuration mode, Privileged user

[Executing Command Instruction]

Log OAM event, including link event and fault event. This command will clear the entire event and log again.

[Explanation of command execution echo]

Set successfully

Set unsuccessfully

[Example]

Clear OAM event information note:

Raisecom(config-port)#**clear oam event**

[Related commands]

Commands	Description
show oam event	Show OAM statistic information.

1.2 clear oam statistics

[Function]

Clear OAM frame statistic.

[Command format]

clear oam statistics

[Command Modes]

Interface configuration mode, Privileged EXEC

[Executing Command Instruction]

Statistic transmission and receiving frame on OAM link, including frame types: information, link event note, loopback, variable request, variable response, organization private, unknown

type and repeat link event notes. This command will clear the entire frame type statistics and start again from zero.

[Explanation of command execution echo]

Set successfully

[Example]

Clear link OAM frame statistic:

Raisecom(config-port)#**clear oam statistics**

[Related commands]

Commands	Description
show oam statistics	Show OAM frame statistic information.

1.3 oam {disable | enable}

[Function]

Enable and disable OAM function.

[Command format]

oam {*disable* | *enable*}

[Parameter]

disable: disable OAM function;

enable: enable OAM function.

[Default]

Enable OAM function.

[Command Modes]

Interface configuration mode, Privileged EXEC

[Executing Command Instruction]

Open and close OAM link function. When OAM function enables and if the link interface is UP, it enter OAM discovery process immediately. When there is at least one OAM in subject mode at the link ends, OAM enters operational state after discovering successfully, use can manage and monitor by command provide by OAM.

[Explanation of command execution echo]

Set successfully.

Set unsuccessfully.

[Example]

Disable OAM link function:

Raisecom(port)#**oam disable**

Enable OAM link function:

Raisecom(port)#**oam enable**

[Related commands]

Commands	Description
show oam	Show OAM information.

1.4 oam peer event trap

[Function]

Enable and disable all OAM link event trap at the other end.

[Command format]

oam peer event trap {*disable* / *enable*}

[Default]

Disable the entire OAM link event trap at the other end.

[Command Modes]

Interface configuration mode, Privileged EXEC

[Executing Command Instruction]

Enable and disable all OAM link event trap for the other end.

If the OAM link event trap is enabled, OAM will send the trap to network management center when it receive OAM link event (OAM must be in master mode).

[Explanation of command execution echo]

Set successfully.

[Example]

Enable peer link OAM event trap:

Raisecom(port)#**oam peer event trap enable**

Disable peer link OAM event trap:

Raisecom(port)#**oam peer event trap disable**

[Related commands]

Commands	Description
show oam trap	Show OAM event trap information.

1.5 oam remote-loopback

[Function]

Enable and disable remote loopback function.

[Command format]

[no] oam remote-loopback

[Command Modes]

Privileged EXEC, interface configuration mode

[Executing Command Instruction]

This function helps to detecting network faults in time.

With remote loopback enabled, the OAM entity operating in active OAM mode issues remote loopback requests and the peer responds to them.

This function can only take effect when OAM work in master mode and operational state. It is only allow one link in loopback.

[Explanation of command execution echo]

Set successfully.

Set unsuccessfully. OAM discovery unsuccessfully complete.

Set unsuccessfully. There is another loopback.

Set unsuccessfully. There is a loopback on another interface.

Set unsuccessfully. The peer doesn't react.

Set unsuccessfully. OAM is passive.

Set unsuccessfully. There is no remote loopback.

[Example]

Startup link OAM remote loopback:

Raisecom(port)#**oam remote-loopback**

Stop link OAM remote loopback:

Raisecom(port)#**no oam remote-loopback**

[Related commands]

Commands	Description
show oam loopback	Show OAM loopback information.

1.6 show oam

[Function]

Review OAM basic function configuration.

[Command format]

show oam [**port-list** *port-list*]

[Parameter]

port-list: port list.

[Command Modes]

Privileged EXEC, Privileged user

[Executing Command Instruction]

Use this command to review link OAM basic information. Including local working mode, management state, maximal message length, configuration version and function in support.

[Explanation of command execution echo]

Raisecom#**show oam**

Port: 1

Mode: Active

Administrate state: Enable

Operation state: Disabled

Max OAMPDU size: 1518

Config revision: 0

Supported functions: Loopback, Event

.....

Raisecom#**show oam port-list 1**

Port: 1

Mode: Active

Administrate state: Enable

Operation state: Disabled

Max OAMPDU size: 1518

Config revision: 0

Supported functions: Loopback, Event

[Example]

Show basic information of the entire OAM links:

Raisecom#**show oam**

[Related commands]

Commands	Description
oam {active / passive}	Set OAM working mode.
oam {disable / enable}	Enable/disable OAM link.

1.7 show oam capability

[Function]

Show OAM management capability supported by remote device.

[Command format]

show oam capability

[Command Modes]

Remote configuration mode, Privileged user

[Executing Command Instruction]

The OAM management capability of remote device under remote configuration mode contains: OAM file transmission, IP address and gateway configuration, SNMP community configuration, port configuration, environment monitor, remote device reset, save and erase of remote device configuration and host name configuration.

The remote device information won't be shown if it is not connected or OAM link is not built.

[Explanation of command execution echo]

Raisecom(config-remote)#**show oam capability**

Local port: 12

OID parse capability [Support]

File transmission via OAM [Support]

IP address and default-gateway configuration [Support]

SNMP community configuration [Support]

Port configuration [Support]

Device environment monitor [Support]

Device reboot [Support]

Save remote device current configuration to flash file [Support]

Device configuration file erasion [Support]

Device hostname configuration [Support]

OAM notification enable configuration [Support]

SFP [Support]

Q-in-Q [Support]

Cable-diagnostics [Support]

[Example]

Raisecom(config-remote)#**show oam capability**

1.8 show oam loopback

[Function]

Review OAM remote loopback information.

[Command format]

show oam loopback [port-list port-list]

[Parameter]

port-list: port list.

[Command Modes]

Privileged EXEC, Privileged user

[Executing Command Instruction]

Use this command to review link OAM remote loopback information. Including local loopback state and loopback response enable condition.

[Explanation of command execution echo]

Raisecom#**show oam loopback**

Port: 1

Loopback status: No

Loopback react: Ignore

.....

Raisecom#**show oam loopback port-list 1**

Port: 1

Loopback status: No

Loopback react: Ignore

[Example]

Show loopback information of the entire OAM link:

Raisecom#**show oam loopback**

[Related commands]

Commands	Description
[no] oam remote-loopback	Start/stop OAM remote loopback.
oam loopback	Enable/disable OAM remote loopback response.

1.9 show oam notify**[Function]**

Review OAM event notify relative setting.

[Command format]

show oam notify [port-list port-list]

[Parameter]

port-list: port list.

[Command Modes]

Privileged EXEC, Privileged user

[Executing Command Instruction]

Uses this command to review link OAM event notify relative setting. The showing information includes link monitor event windows and threshold setting as well as monitor event and fault event notify enable setting.

[Explanation of command execution echo]

Raisecom#**show oam notify**

Port: line1

Errored frame period: Enable

Errored frame period window: 1000ms

Errored frame period threshold: 1

Errored frame: Enable

Errored frame window: 1s

Errored frame threshold: 1

Errored frame seconds summary: Enable

Errored frame seconds summary window: 60s

Errored frame seconds summary threshold: 1

Dying gasp: Enable

Critical event: Enable

Port: client1

Errored frame period: Enable

Errored frame period window: 1000ms

Errored frame period threshold: 1

Errored frame: Enable

Errored frame window: 1s

Errored frame threshold: 1

Errored frame seconds summary: Enable

Errored frame seconds summary window: 60s

Errored frame seconds summary threshold: 1

Dying gasp: Enable

Critical event: Enable

.....

Raisecom#show oam notify line 1

Port: line1

Errored frame period: Enable

Errored frame period window: 1000ms

Errored frame period threshold: 1

Errored frame: Enable

Errored frame window: 1s

Errored frame threshold: 1

Errored frame seconds summary: Enable

Errored frame seconds summary window: 60s

Errored frame seconds summary threshold: 1

Dying gasp: Enable

Critical event: Enable

[Example]

Show the entire link OAM event notify relative information:

Raisecom#**show oam notify**

Show line 1 OAM event notify relative information:

Raisecom#**show oam notify line 1**

[Related commands]

Commands	Description
oam notify	Enable/disable OAM event notification.
oam errored-frame	Set link error frame event monitor window and threshold.
oam errored-frame-period	Set link error frame period event monitor window and threshold.
oam errored-frame-seconds	Set link error frame second statistic event monitor window and threshold.
oam errored-symbol-period	Set link error symbol period event monitor window and threshold.

1.10 show oam peer**[Function]**

Review peer OAM basic function configuration.

[Command format]

show oam peer [**port-list** *port-list*]

[Parameter]

port-list: port list.

[Command Modes]

Privileged EXEC, Privileged user

[Executing Command Instruction]

Uses this command to review peer link OAM basic information. The showing information includes peer MAC address, manufacturer OUI, manufacturer information, mode setting, maximal message length, configuration version and supported functions. Show nothing if link OAM is in not operational state.

[Explanation of command execution echo]

Raisecom#**show oam peer**

Port: 1

Port: 2

Peer MAC address: 000E.5E40.6A22

Peer vendor OUI: 000E5E

Peer vendor info: 1

Peer mode: Passive

Peer max OAMPDU size: 1518

Peer config revision: 0

Peer supported functions: Loopback, Event, Variable

Port: 3

.....

Raisecom#show oam peer port-list 2

Port: 2

Peer MAC address: 000E.5E40.6A22

Peer vendor OUI: 000E5E

Peer vendor info: 1

Peer mode: Passive

Peer max OAMPDU size: 1518

Peer config revision: 0

Peer supported functions: Loopback, Event, Variable

[Example]

Show the peer link OAM basic information:

Raisecom#show oam peer

[Related commands]

Commands	Description
oam {active passive}	Set OAM working mode.
oam {disable enable}	Start/stop link OAM.

1.11 show oam peer event

[Function]

Review peer OAM reported event.

[Command format]

show oam peer event [port-list port-list]

show oam peer event critical

show oam peer event port-list port-list critical

[Parameter]

port-list: port list.

line-list: line port list;

client-list: client port list.

[Command Modes]

Privileged EXEC, Privileged user

[Executing Command Instruction]

Uses this command to review peer link OAM reported event, including link event and critical event.

The showing information includes peer locate link, event occur time, window, threshold, current value and event number. Critical event doesn't have window and threshold setting and current value items, so these items shows 0.

[Explanation of command execution echo]

Raisecom#**show oam peer event**

Port: 1

Port: 2

.....

Raisecom#**show oam peer event port-list 1**

Port: 1

Raisecom#**show oam peer event critical**

Port: 1

Port: 2

.....

Raisecom#**sh oam event port-list 1 critical**

Port: 1

[Example]

Show the entire link OAM event note:

Raisecom#**show oam peer event**

Show the entire peer link critical event note:

Raisecom#**show oam peer event critical**

[Related commands]

Commands	Description
clear oam event	Clear event notification.

1.12 show oam statistics**[Function]**

Review OAM frame statistic information.

[Command format]

show oam statistics [**port-list** *port-list*]

[Parameter]

port-list: port list.

[Command Modes]

Privileged EXEC, Privileged user

[Executing Command Instruction]

Statistic transmission and receiving frame on OAM link, including frame types: information, link event note, loopback, variable request, variable response, organization private, unknown type and repeat link event notes. This command shows the frame type total received and transmitted by OAM since system boot or the last time frame statistic clear.

[Explanation of command execution echo]

Raisecom#**show oam statistics**

Port: 1

	<i>Tx</i>	<i>Rx</i>

<i>Information</i>	: 0	0
<i>Event notification</i>	: 0	0
<i>Loopback control</i>	: 0	0
<i>Variable request</i>	: 0	0
<i>Variable response</i>	: 0	0
<i>Organization specific</i>	: 0	0
<i>Unsupported codes</i>	: 0	0
<i>Duplicate event notification</i>	: 0	0

Port: 2

	<i>Tx</i>	<i>Rx</i>

<i>Information</i>	: 3655	500
<i>Event notification</i>	: 0	0
<i>Loopback control</i>	: 0	0
<i>Variable request</i>	: 0	0
<i>Variable response</i>	: 0	0
<i>Organization specific</i>	: 3	500
<i>Unsupported codes</i>	: 0	0
<i>Duplicate event notification</i>	: 0	0

.....

Raisecom#**show oam statistics** *port-list* 2

Port: 2

	<i>Tx</i>	<i>Rx</i>

Information	: 3982	500
Event notification	: 0	0
Loopback control	: 0	0
Variable request	: 0	0
Variable response	: 0	0
Organization specific	: 3	500
Unsupported codes	: 0	0
Duplicate event notification	: 0	0

[Example]

Show the entire link OAM frame statistic information:

Raisecom#**show oam statistics**

Show the line 2 OAM frame statistic information:

Raisecom#**show oam peer statistics** *port-list* 2

[Related commands]

Commands	Description
clear oam statistics	Clear OAM frame statistic.

1.13 show oam trap

[Function]

Review OAM link event notify trap information.

[Command format]

show oam trap [**port-list** *port-list*]

[Parameter]

port-list: port list.

[Command Modes]

Privileged EXEC, Privileged user

[Executing Command Instruction]

The showing information contains link monitor event, peer link event trap enable condition and latest OAM loss and discover trap total as well as happen time.

[Explanation of command execution echo]

Raisecom#**show oam trap**

Port: 1
Event trap: Disable
Peer event trap: Disable
Discovery trap total: 0
Discovery trap timestamp: 0 days, 0 hours, 0 minutes
Lost trap total: 0
Lost trap timestamp: 0 days, 0 hours, 0 minutes

Port: 2
Event trap: Disable
Peer event trap: Disable
Discovery trap total: 1
Discovery trap timestamp: 0 days, 2 hours, 25 minutes
Lost trap total: 1
Lost trap timestamp: 0 days, 2 hours, 41 minutes

.....

Raisecom#show oam trap port-list 2

Port: 2
Event trap: Disable
Peer event trap: Disable
Discovery trap total: 1
Discovery trap timestamp: 0 days, 2 hours, 25 minutes
Lost trap total: 1
Lost trap timestamp: 0 days, 2 hours, 41 minutes

[Example]

Show the entire link OAM event notify trap information:

Raisecom#show oam trap

Show the line 1 OAM event notify trap information:

Raisecom#show oam peer trap line 1

[Related commands]

Commands	Description
oam event trap	Enable/disable link event trap notification.



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